REMARKS

The Examiner's Final Action mailed on March 26, 2004, has been received and its contents carefully considered.

Claims 1-20 are currently pending in this application. Claims 1, 6 and 14 are independent claims. The pending claims are restated above for reference.

Applicant notes with appreciation the Examiner's indication that claims 14-20 are allowed, and that claims 2-5 would be allowable if rewritten in independent form to include all the limitations of the base claim (i.e., claim 1) and any intervening claims.

In the Final Action, claims 1, 6 and 9-12 are rejected under 35 USC §102(e) as being anticipated by Barany (U.S. Patent No. 4,802,214). Claim 13 is rejected under 35 USC §103(a) as being obvious over Barany. Claims 7 and 8 are rejected under 35 USC §103(a) as being obvious over Barany in view of Suzuki et al. (U.S. Patent No. 6,522,665 B1). The rejections are respectfully traversed.

Regarding claim 1, the Examiner points to Barany as teaching a receiving circuit comprising: a demodular circuit demodulating a radio signal (Barany Fig.1: 11) that includes a burst signal (Barany: when the system starts, it will go from having no data to having data and thus this is also a burst) and outputting demodulated data therefrom; a detector which detects a synchronizing pattern (Barany Fig. 1: SYNC 17, 19) included in the demodulated data and outputs an instruction signal for providing instructions for a result of the detection (Barany Fig. 1: output of 17, 19); a pulse generator (Barany Fig. 1: 41) capable of receiving the instruction signal and outputting a pulse signal (Barany Fig. 1: output of 41) each time a predetermined time elapses since the reception of the instruction signal (Barany paragraph 17: "The vertical interval detector includes a pulse generator 41 which emits a pulse whenever horizontal synchronizing pulses disappear for the output of horizontal synchronizing signal detector 19"); a control circuit (Barany Fig. 1:43) which outputs control signals corresponding to at least one of the instruction signal and the pulse signal (Barany Fig. 1:output of 41); and a clock generator which generates a clock for storing and outputting desired data included in the demodulated data in response to the control signal (Barany abstract: "generating timing pulses in the form of other whiter-than-white pulses in the scrambled television signal"; paragraph 10: "Monostable multivibrator

33 acts as a whiter-than-white pulse generator as its output is applied through NOR gate 35 to a terminal B which is another input to switchable attenuator 42.").

The present invention is directed to a receiving circuit suitable for use in a radio apparatus operating in TDMA mode, in which burst signals each containing a synchronization pattern and data are received in predetermined time slots (see, generally, application pages 1-2). In contrast, Barany is directed to an in-band television signal scrambling method and apparatus which employs a scrambler which receives and scrambles an analog television signal and one or more descramblers for restoring the scrambled television signal to an unscrambled condition. A tier level encoding scheme is used to identify and render operative predetermined descramblers. The scrambler encodes tier level coding information in the form of whiter-than-white pulses on the scrambled television signal, these pulses being detected by the descramblers with only those descramblers identified by the tier level coding information being rendered operative to unscramble the scrambled television signal (Barany abstract).

Contrary to the Examiner's position, it is respectfully submitted that Barany fails entirely to teach or suggest "a demodulator circuit demodulating a radio signal that includes a burst signal and outputting the demodulated data therefrom" (emphasis added) as claim 1 recites. Each word in a claim must be given its proper meaning, as construed by a person skilled in the art. Where required to determine the scope of a recited term, the disclosure may be used. Thus, properly construed, the term "burst signal" refers to a signal transmitted intermittently, such as that used in the TDMA system described in the present application (see Fig. 2 and page 11, lines 2-14). The Examiner's suggestion that "when the system starts, it will go from having no data to having data and thus this is also a burst," is an overbroad construction of the term and clearly inconsistent with the present application as well as the common understanding of those skilled in the art. The signal which is being demodulated in Barany is an analog TV signal (see Figs. 4A-4D), and plainly lacks any sort of intermittent, "bursty" character.

Other elements identified by the Examiner in Barany also fail to correspond to those recited in the claims. For example, items 17 and 19 in Figure 1 are identified in Barany as vertical and horizontal synchronization detectors, respectively. According to Barany, these circuits are well known in the art and serve to separate the horizontal

synchronizing signals from the vertical synchronizing signals which are present in a television signal (column 4, lines 39-45). Barany discloses in Figure 4A that the horizontal synchronization signal comprises a single pulse 173 that appears, during a horizontal retrace interval "a", in a blacker-than-black region above the "black" level of video information signal 171 which varies within an amplitude range 181. Thus, the synchronization detector 19 in Barany is not detecting "a synchronization pattern included in the demodulated data," as claim 1 would require, but rather it is outputting a response to each of the individual synchronization pulses in order to generate synchronizing signal suppression pulses (see column 4, lines 51-60). Barany certainly does not discloses a synchronization "pattern," as that term is used in the present application (see present application Figure 2 and page 11, line 15, through page 12, line 2).

As described by the Examiner, the pulse generator 41 "emits a a pulse whenever horizontal synchronizing pulses disappear for the output of the horizontal synchronizing signal detector 19." However, Barany fails to teach or suggest "a pulse generator capable of receiving the instruction signal and outputting a pulse signal each time a predetermined time elapses since the reception of the instruction signal" (emphasis added), as claim 1 would require.

As the Examiner notes, Barany discloses "generating timing pulses in the form of other whiter-than-white pulses in the scrambled television signal" and that "monostable multivibrator 33 acts as a whiter-than-white pulse generator as its output is applied through NOR gate 35 to a terminal B which is another input to switchable attenuator 42." Thus, the whiter-than-white pulses generated by the invention in Barany are used to turn the RF signal on and off using the switchable attenuator 42 (see, for example, column 8, lines 19-23). Contrary to the Examiner's position, there is no teaching or suggestion in Barany of "a clock generator which generates a clock signal for storing and outputting desired data included in the demodulated data in response to the control signal" (emphasis added), as claim 1 requires. Barany does not appear to disclose at all any circuit having the function or capability of storing and outputting demodulated data.

For at least the forgoing reasons, it is respectfully submitted that the Examiner has not met the burden of showing that each element of claim 1 is found in the applied reference.

With regard to independent claim 6, Examiner points to Barany as teaching a radio signal receiving circuit comprising: a demodulator circuit demodulating a burst signal that is included in a radio signal received by the demodulator circuit, the demodulator circuit outputting demodulated data; a detector detecting a synchronizing pattern signal from the demodulated data received thereto; a pulse generator generating a pulse signal in response to the synchronizing pattern signal (Barany Fig. 1: 41 with 43); a control circuit generating a control signal in response to the synchronizing pattern signal and the pulse signal (Barany Fig. 1: 45); a clock generator outputting a clock signal in response to the control signal; and a storing circuit storing and outputting the demodulated data in response to the clock signal.

Most of these limitations have already been addressed in connection with claim 1. In addition, it is clear from the foregoing discussion that the Examiner has failed to demonstrate that Barany discloses any circuit having the function or capability of storing and outputting demodulated data. Hence, it is respectfully submitted that claim 6, as well as claims 7-13, patentably distinguish over the Barany reference.

Regarding claim 7, the Examiner acknowledges that Barany fails to teach the burst signal as including a preamble, unique word, an error detection bit and data. To overcome this acknowledged deficiency, the Examiner points to Fig. 5 of Suzuki as disclosing a frame length, unique word, CRC, and information data. Examiner argues that it would have been obvious to one skilled in the art at the time of the invention to modify Barany so that data can be transmitted in frames as Suzuki teaches, and that one would be motivated to do so for efficiency.

The Suzuki reference is directed to a data sequence generator for a digital transmission system employing data frames having header information including a unique word. Contrary to the Examiner's assertions, it is submitted that a person of ordinary skill in the art would not have been motivated to combine the teachings of Suzuki with the very different analog TV technology taught by Barany. Nor does the Examiner demonstrate convincingly how the references could be combined to successfully produce the claimed invention. Accordingly, it is respectfully submitted that claim 7, as well as claim 8, patentably distinguish over the applied art combination of Barany and Suzuki.

The All of the claim rejections having been addressed, it is respectfully submitted that the application is in condition for allowance. Notice of such, with pending claims 1-20, is earnestly solicited.

Should the Examiner believes that an interview would be helpful in resolving any open issues regarding this application, the Examiner is respectfully invited to call the undersigned attorney to schedule such an interview.

Respectfully submitted,

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Date

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